




OPERATION WARPED GRENED

- 
1. What was Operation Warp Speed?
 2. Who ran OWS?
 3. Who profited/benefited off OWS?
 4. Which drugs for C19 were allowed/funded through OWS or the US Gov.
 5. What proof is there C19 was planned?
 6. What proof is there that the Intelligence Community is involved?
 7. What are the biggest inconsistencies about the pandemic response that have gone unanswered for ?

Metrics

- 1.6 billion doses procured
- 582 million doses delivered domestically; 150 million internationally
- Distribution to more than 91,000 sites
- 86 percent of 18+ population received one shot; 207 million Americans fully vaccinated
- 87 percent of ≥65 population, the most vulnerable demographic, fully vaccinated
- 75 million booster doses administered
- 7 million pediatric (ages 5–11) doses administered between 1 November and December 2021
- Managed allocation and ordering of 3.9 million courses of monoclonal antibodies¹⁰



At the time that the CAG was dissolved, the entire U.S. resident population had available and equitable access to a COVID-19 vaccine. The COVID-19 domestic countermeasures production ecosystem was more robust and secure; vaccine waste had been minimized; an IT architecture that provided data on allocations, distribution, and administration was in place; and booster, adolescent, and pediatric vaccine campaigns were ongoing.

Most importantly, the vaccines and therapeutics produced and delivered by the CAG averted an estimated 1.1 million additional COVID-19 deaths and more than 10.3 million additional COVID-19 hospitalizations in the United States as of November 2021.¹¹ This achievement supported and nested with the recovery outlined in the *National Strategy for COVID-19 Response and Pandemic Preparedness* (January 2021).¹² The CAG's efforts arguably saved more American lives than any other DOD effort in U.S. history.



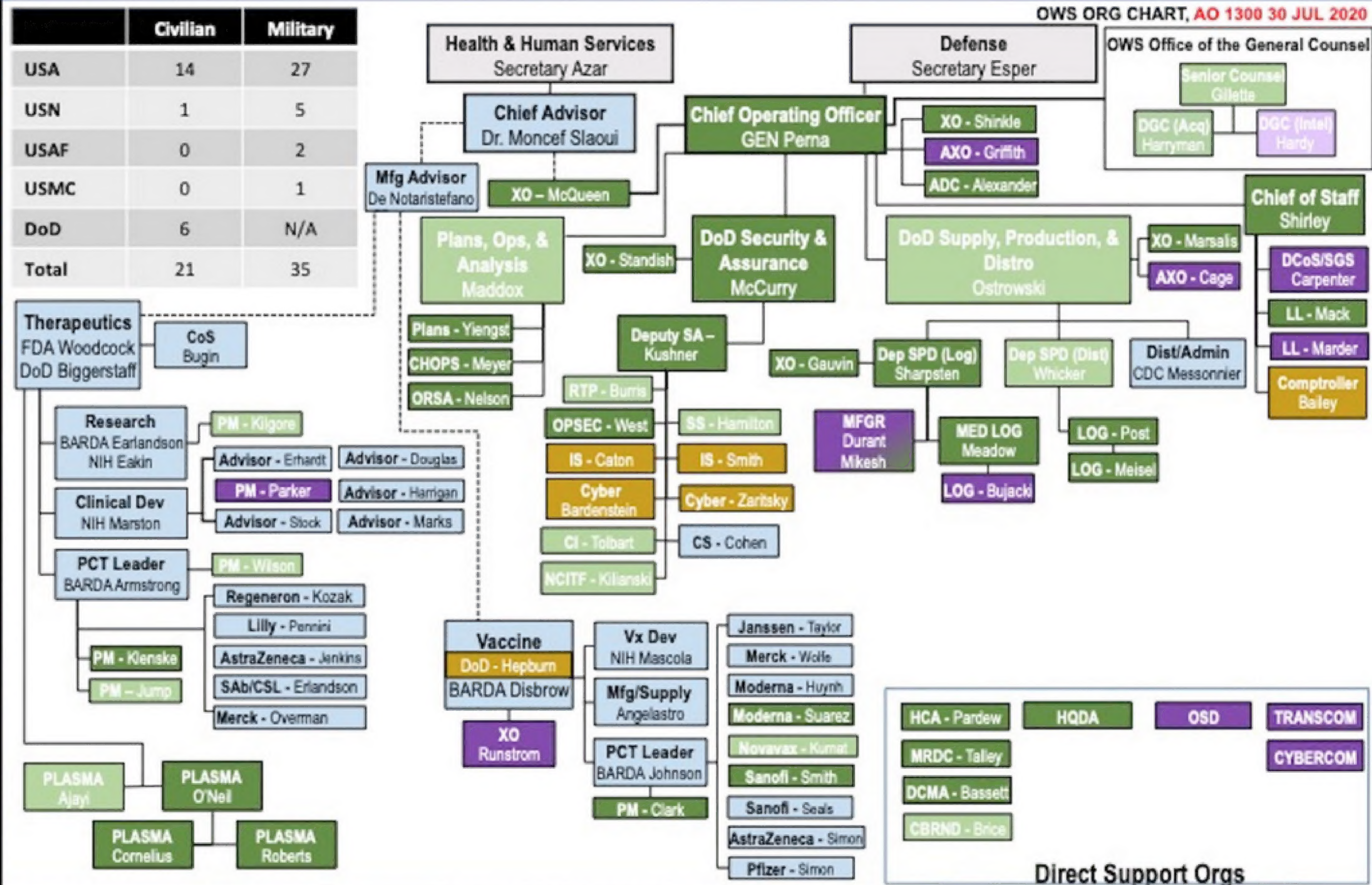
OPERATION
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Operation Warp Speed




	Civilian	Military
USA	14	27
USN	1	5
USAF	0	2
USMC	0	1
DoD	6	N/A
Total	21	35



OPERATION WARP SPEED

DELIBERATIVE | PRE-DECISIONAL | DRAFT

ARMY ARMY CIV JOINT JOINT CIV DOD NON-DOD 1

An HHS spokesperson declined to comment directly on the chart, citing precedent that the agency does not comment on leaked documents. But the spokesperson noted that at least 600 HHS officials are involved in Warp Speed. The majority of those employees are not captured by the chart obtained by STAT. Among the decision makers not included in the chart are Mango and HHS' Assistant Secretary for Preparedness and Response, Bob Kadlec. Mango told STAT that he and Kadlec personally sign off on every business agreement made by HHS for Operation Warp Speed.

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Mango also added that the vast majority of scientists working on Operation Warp Speed work for the companies the effort is funding.

But Slaoui knows firsthand, perhaps better than anyone else, what it takes to dramatically speed up the search for a vaccine. He played a pivotal role in GSK's sprint to develop an Ebola vaccine in 2015. The effort ultimately failed, but he is so well-regarded at GSK that the company named its vaccine research center after him in 2016.

Anthony Fauci, the director of the National Institute for Allergy and Infectious Diseases, approvingly called Operation Warp Speed a "talent show."

"If you go through the organizational boxes of Operation Warp Speed, they're very, very impressive," Fauci told STAT in an interview Friday.

BARDA plays perhaps the most head-scratching role in Operation Warp Speed. The organization's acting director, Gary Disbrow, a camera-shy bureaucrat who was catapulted into the job after the ouster of his boss, [Rick Bright](#), is listed as co-leading the vaccine effort alongside Hepburn, and a number of other BARDA leaders are included in the chart.

But three sources told STAT that Disbrow, and BARDA more generally, are playing a marginal role in Warp Speed. "BARDA has been largely sidelined in all of this," one pharmaceutical industry source told STAT.

Ganti of SiO2, however, told STAT that the company deals primarily with BARDA for all of its Warp Speed-related questions. Mango also told STAT BARDA officials meet with Warp Speed officials daily "to make sure contracts are moving along."

BARDA also appears to be fronting a large chunk of the funding for the Warp Speed initiative, alongside the Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense.

1. **AstraZeneca** — In May, AstraZeneca [signed a contract](#) for \$1.2 billion to boost access to its COVID-19 vaccine. In October, the drugmaker [signed a second contract](#) for \$486 million for the U.S. to secure 100,000 doses of its experimental COVID-19 antibody drug and support clinical trials for the drug.
2. **Cytiva** — The Massachusetts drugmaker [signed a contract](#) in October for \$31 million to scale up production of materials needed to produce COVID-19 vaccines, such as liquid and dry powder cell culture media, cell culture buffers, bioreactors and mixer bags.
3. **Eli Lilly** — In October, Eli Lilly signed a \$375 million contract to supply 300,000 vials of its COVID-19 antibody drug, which was [granted emergency authorization](#) by the FDA in November. In early December, the drugmaker [signed another \\$812.5 million contract](#) to supply 650,00 more doses of the drug.
4. **Emergent BioSolutions** — In June, Emergent BioSolutions [signed a \\$628 million contract](#) to ramp up its contract development and manufacturing capabilities to expedite the delivery of COVID-19 vaccines.
5. **Fujifilm** — In July, Fujifilm [signed a \\$265 million contract](#) to manufacture COVID-19 vaccines.
6. **Johnson & Johnson** — In August, Johnson & Johnson signed a [more than \\$1 billion contract](#) to supply the U.S. with 100 million doses of its COVID-19 vaccine if it is authorized.
7. **Moderna** — In August, Moderna [signed a \\$1.5 billion contract](#) to supply the U.S. with 100 million doses of its COVID-19 vaccine, if it is authorized.
8. **Novavax** — In July, Novavax signed a [\\$1.6 billion contract](#) to supply the U.S. with 100 million doses of its COVID-19 vaccine, if it is authorized.
9. **Pfizer & BioNTech** — In July, Pfizer and BioNTech [partnered to sign a \\$1.95 billion contract](#) to supply up to 600 million doses of its COVID-19 vaccine. Under the contract, the U.S. would receive 100 million doses of the vaccine with the opportunity to secure 500 million more doses, but the U.S. [did not secure the additional doses](#).
10. **Regeneron** — In July, Regeneron [signed a \\$450 million contract](#) to manufacture thousands of doses of its COVID-19 antibody cocktail, which was [granted emergency authorization](#) in November.
11. **Sanofi & GlaxoSmithKline** — In July, Sanofi and GlaxoSmithKline [partnered to sign a \\$2.1 billion contract](#) for development of the drugmaker's COVID-19 vaccine as well as an initial supply of 100 million doses.

CARES ACT & OPERATION WARP SPEED

- The CARES Act provided funding for Operation Warp Speed.
- Operation Warp Speed was initially funded with about \$10 billion from the CARES Act (Coronavirus Aid, Relief, and Economic Security) passed by the United States Congress on March 27, 2020.
- Congress directed almost \$10 billion to Operation Warp Speed through supplemental funding, including the CARES Act. This included more than \$6.5 billion designated for countermeasure development through BARDA and \$3 billion for NIH research.
- In searching for funding, the Operation Warp Speed team pulled \$10 billion from the CARES Act, which was there thanks to Treasury Secretary Steven Mnuchin, who had added extra money to the Strategic National Stockpile in order to create a slush fund.
- In summary, the CARES Act provided a significant portion of the initial funding for Operation Warp Speed's efforts to accelerate the development and production of COVID-19 vaccines and treatments.

The Act allocated over \$10 billion specifically for this purpose.

OWS MCM Enterprise & Responsible Participants

OWS Injectables, therapies & other biological MCMs			
Drug Name(s):	Manufacturers:	Market Status:	Involved Government Affiliations & Agencies:
Remdesivir/Veklury	Gilead+ Ligand Pharmaceuticals	1st Use May 2020, Full Approval Oct 2020 All ages by April 2022	USAMRIID, NIH, UNC Chapel Hill, Univ AL, Vanderbilt, Columbia, DTRA, JSTO-CBD, DARPA
Lagevrio/ Molnupiravir	Merck +Ridgeback Bio	First Authorization Dec 2021	Emory DRIVE LLC
Paxlovid/ niratrelvir+ritonavir	Pfizer	Full Approval May 2023 First Use Dec 2021	
Bamlanivimab/LY-CoV555	Abcellera +Eli Lilly	EUA Nov 2020,Renewed March 2021 Revoked April 2021	BMGF + DARPA's P3 Program [ADEPT]
Bebtelovimab	Abcellera +Eli Lilly	EUA Feb 2022	Bill & Melinda Gates Foundation

Educational Institutions	Non-Government Organizations	Governmental Organizations
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Vanderbilt UNC Chapel Hill Univ. Penn Univ TX Med Branch Dartmouth Emory Univ. Alabama Johns Hopkins Georgetown	Bill & Melinda Gates Foundation [BMGF] Scripps CEPI Wellcome Trust EcoHealth Alliance In-Q-Tel	JPEO-CBRN ARMY NIH/NIAID/FNIH DARPA DTRA BARDA ASPR/HHS DHS-CWMD
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U.S. Department of Defense

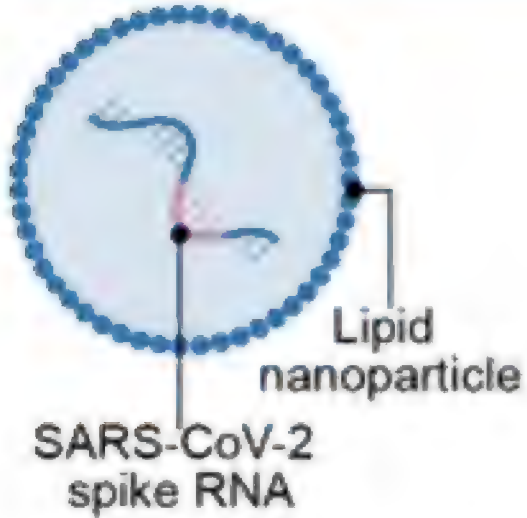
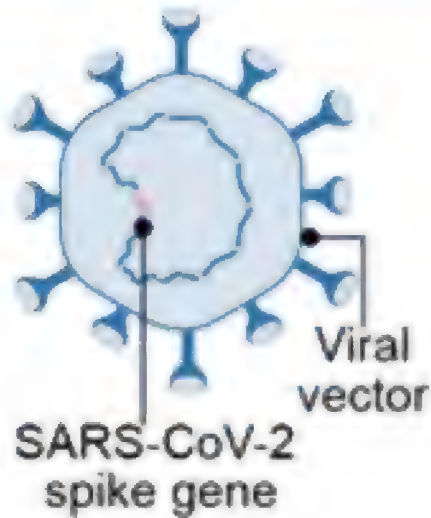

Operation Warp Speed will organize multiple, parallel lines of effort, Perna said during his Senate confirmation hearing in June. "Vaccine, therapeutics and diagnostic developments or evaluations are taking place concurrently," he said. "HHS and DOD have already started to increase manufacturing and distribution capacity and capability. Upon approval from [the Food and Drug Administration], Warp Speed will immediately energize manufacturing and distribution networks, in conjunction with industry partners, to speed delivery of those new products to the nation. This is the considered risk we must evaluate and be prepared to take, expanding manufacturing prior to FDA approval."

DOD has led other successful projects, including:

- World War II's Manhattan Project, which developed the atomic bomb. Army Maj. Gen. Leslie Groves and physicist J. Robert Oppenheimer led the public-private partnership. Scientists conducted research, and the military awarded contracts to build a vast industrial infrastructure.
- A 2007 project to build mine-resistant, ambush-protected vehicles to better protect troops from improvised explosive devices. The vehicles were deployed to the battlefields of Iraq and Afghanistan later that year. More than 12,000 were produced before the program ended in 2012.

<https://www.defense.gov/News/News-Stories/Article/Article/2311177/operation-warp-speed-on-track-for-end-of-year-vaccine-delivery/>

Vaccine Platform Technologies Supported by Operation Warp Speed, as of January 2021

	mRNA platform	Replication-defective live-vector platform	Recombinant-subunit-adjuvanted protein platform
			
Description	Encapsulated genetic instructions that allow vaccinated individuals to produce the spike protein of SARS-CoV-2 to stimulate immune system but cannot cause COVID-19.	Non-replicating virus that delivers genetic instructions to allow vaccinated individuals to produce the spike protein of SARS-CoV-2 to stimulate immune system but cannot cause COVID-19.	Fully-formed spike protein of SARS-CoV-2 delivered with adjuvant, which helps to stimulate immune system of vaccinated individuals but cannot cause COVID-19.
Operation Warp Speed candidates (most advanced clinical trial phase)	Moderna (phase 3) Pfizer/BioNTech (phase 3)	Janssen (phase 3) AstraZeneca (phase 3)	Sanofi/GSK (phase 2) Novavax (phase 3)

Source: GAO (analysis); Adaptation of images depicting vaccine technologies with permission from Springer Nature: *Nature* ("The Race for Coronavirus Vaccines: A Graphical Guide," Ewen Callaway) © 2020. | GAO-21-319

<https://www.defense.gov/News/News-Stories/Article/Article/231177/operation-warp-speed-on-track-for-end-of-year-vaccine-delivery/>

December

December 11, 2020

FDA issued the first emergency use authorization (EUA) for use of [the Pfizer-BioNTech COVID-19 vaccine](#) in persons aged 16 years and older for the prevention of COVID-19.

December 14, 2020

The first deliveries of the COVID-19 vaccines began.

December 18, 2020

FDA issued the second EUA for use of [the Moderna COVID-19 vaccine](#) in persons aged 18 years and older for the prevention of COVID-19.

February

February 27, 2021

FDA issued the third EUA for use of [the Janssen COVID-19 vaccine](#) in persons aged 18 years and older for the prevention of COVID-19.

March

March 2, 2021

Acting HHS Secretary directed that [teachers, school staff, and child care workers are eligible for COVID-19 vaccinations - PDF*](#).

March 17, 2021

Acting HHS Secretary issued [a directive to expand COVID-19 vaccine eligibility to all Americans - PDF*](#) by May 1, 2021.

OWS Timeline Dec 2020 - Mar 2021

<https://www.hhs.gov/coronavirus/covid-19-vaccines/index.html>

April

April 19, 2021

The White House announced that [all people age 16 and older are eligible for the COVID-19 vaccine](#).

May

May 10, 2021

FDA amended the emergency use authorization for the Pfizer-BioNTech COVID-19 vaccine to include adolescents [12 through 15 years of age](#).

August

August 23, 2021

[FDA approved the first COVID-19 vaccine](#), Comirnaty (COVID-19 Vaccine, mRNA), which was previously known as Pfizer-BioNTech COVID-19 Vaccine, for the prevention of COVID-19 disease in individuals 16 years of age and older.

September

September 22, 2021

FDA amended the emergency use authorization (EUA) to allow [a single booster dose of the Pfizer-BioNTech COVID-19 vaccine](#) to be administered at least six months after completion of the vaccine's primary series in certain populations.

September 25, 2021

HHS Secretary issued [a directive to allow a booster dose of the Pfizer COVID-19 vaccine to certain populations](#) [-PDF](#).

Apr 2021 - Sept 2021

<https://www.hhs.gov/coronavirus/covid-19-vaccines/index.html>

October

October 20, 2021

FDA amended the emergency use authorizations (EUAs) to allow for a [single booster dose the Moderna COVID-19 vaccine and Janssen \(Johnson and Johnson\) COVID-19 vaccine](#). FDA also authorized the use of heterologous (or "mix-and-match") booster dose of an available vaccine in eligible individuals following completion of primary vaccination with a different COVID-19 vaccine.

October 22, 2021

HHS Secretary issued a [directive on Moderna and Janssen \(Johnson and Johnson\) vaccine boosters - PDF*](#)

October 29, 2021

FDA authorized the emergency use (EUA) for the Pfizer-BioNTech COVID-19 Vaccine for the prevention of COVID-19 to include [children 5 through 11 years of age](#).

November

November 3, 2021

HHS Secretary issued a [directive to expand eligibility for children five years and older - PDF](#) to receive an age-appropriate dose of the Pfizer COVID-19 vaccine.

November 8, 2021

A [joint letter - PDF](#) from HHS Secretary Becerra and Education Secretary Cardona is issued about how schools can support COVID-19 vaccination for children.

November 21, 2021

HHS Secretary issued a [directive to expand eligibility for all adults ages 18 and older - PDF](#) to receive a booster dose of COVID-19 vaccines.

Oct 2021 - Nov 2021

<https://www.hhs.gov/coronavirus/covid-19-vaccines/index.html>

December

December 10, 2021

HHS Secretary issued a [directive to expand eligibility for adolescents ages 16 and 17 - PDF](#) to receive a booster dose of the Pfizer COVID-19 vaccine.

January

January 10, 2022

HHS Secretary issued a [directive to expand eligibility for children ages 12 through 15 years - PDF](#) to receive a booster dose of the Pfizer COVID-19 vaccine, and to allow a third vaccine dose for immunocompromised children 5 through 11 years of age.

January 31, 2022

[FDA approved the second COVID-19 vaccine](#), Spikevax (COVID-19 Vaccine, mRNA), which was previously known as Moderna COVID-19 Vaccine; the approved vaccine will be marketed as Spikevax for the prevention of COVID-19 in individuals 18 years of age and older.

May

May 17, 2022

FDA expanded eligibility for the Pfizer-BioNTech COVID-19 vaccine to allow [a single booster dose for children 5 through 11 years of age](#).

May 23, 2022

HHS Secretary issued [a directive to expand eligibility for a single booster dose to children ages 5 through 11 years and updated the recommendation of a second COVID-19 vaccine booster dose to certain populations - PDF](#).

Dec 2021 - May 2022

<https://www.hhs.gov/coronavirus/covid-19-vaccines/index.html>

June

June 17, 2022

FDA authorized Moderna and Pfizer-BioNTech [COVID-19 vaccines for children down to 6 months of age](#).

June 18, 2022

HHS Secretary issued a [directive to expand eligibility of the Moderna COVID-19 vaccine for children 6 months through 5 years old and the Pfizer-BioNTech COVID-19 vaccine for children 6 months through 4 years old - PDF](#).

June 24, 2022

HHS Secretary issued a [directive to expand eligibility of a two-dose series of the Moderna COVID-19 vaccine for children ages 6 years through 17 years, and an additional Moderna dose for children in that age group who are immunocompromised - PDF](#).

July

July 13, 2022

FDA authorized [emergency use of Novavax COVID-19 Vaccine, Adjuvanted](#) for individuals 18 years of age and older.

July 21, 2022

HHS Secretary issued a [directive on the use of a two-dose Novavax COVID-19 Vaccine, Adjuvanted for persons ages 18 years and older - PDF](#).

Jun 2022 - Jul 2022

<https://www.hhs.gov/coronavirus/covid-19-vaccines/index.html>

September

September 2, 2022

HHS Secretary issued a [directive on bivalent COVID-19 vaccine booster doses for individuals ages 12 years and older - PDF](#).

October

October 13, 2022

HHS Secretary issued a [directive on bivalent COVID-19 vaccine booster doses for individuals ages 5 years and older - PDF](#).

December

December 8, 2022

FDA authorizes the emergency use of the updated ([bivalent](#)) Moderna and Pfizer COVID-19 vaccines for [children ages 6 months and up](#).

December 9, 2022

HHS Secretary issued a [directive on bivalent vaccines for children starting at 6 months of age - PDF](#)

April

April 18, 2023

FDA amended the emergency use authorization to [simplify the vaccination schedule for bivalent Moderna and Pfizer-BioNTech COVID-19 vaccines](#)

April 24, 2023

HHS Secretary issued a [directive on simplified and expanded use of bivalent mRNA COVID-19 vaccines - PDF](#)

Sep 2022 - Apr 2023

<https://www.hhs.gov/coronavirus/covid-19-vaccines/index.html>

October

October 3, 2023

FDA authorized the [updated Novavax COVID-19 Vaccine, Adjuvanted \(2023-2024 Formula\)](#) for individuals ages 12 and older

September

September 11, 2023

FDA approved and authorized the emergency use of the [updated Moderna and -BioNTech COVID-19 vaccines](#) formulated to better protect against currently circulating variants

[REDACTED]



OFFICE OF THE DIRECTOR OF NATIONAL INTELLIGENCE

(U) Potential Links Between the Wuhan Institute of Virology and the Origin of the COVID-19 Pandemic

June 2023

Classified By:
Derived From:
Declassify On:



[REDACTED]



- [REDACTED] Some of the WIV's genetic engineering projects on coronaviruses involved techniques that could make it difficult to detect intentional changes. A 2017 dissertation by a WIV student showed that reverse genetic cloning techniques—which are standard techniques used in advanced molecular laboratories—left no traces of genetic modification of SARS-like coronaviruses.

some of their symptoms were consistent with but not diagnostic of COVID-19. The IC continues to assess that this information neither supports nor refutes either hypothesis of the pandemic's origins because the researchers' symptoms could have been caused by a number of diseases and some of the symptoms were not consistent with COVID-19. Consistent with standard practices, those researchers likely completed annual health exams as part of their duties in a high-containment biosafety laboratory. The IC assesses that the WIV maintains blood samples and health records of all of their laboratory personnel—which are standard procedures in high-containment laboratories.

- [REDACTED] We have no indications that any of these researchers were hospitalized because of the symptoms consistent with COVID-19. One researcher may have been hospitalized in this timeframe for treatment of a non-respiratory medical condition.
- [REDACTED] China's National Security Commission investigated the WIV in early 2020 and took blood samples from WIV researchers. According to the World Health Organization's March 2021 public report, WIV officials including Shi Zhengli—who leads the WIV laboratory group that conducts coronavirus research—stated lab employee samples all tested negative for SARS-CoV-2 antibodies.

[REDACTED] While several WIV researchers fell mildly ill in Fall 2019, they experienced a range of symptoms consistent with colds or allergies with accompanying symptoms typically not associated with COVID-19, and some of them were confirmed to have been sick with other illnesses unrelated to COVID-19. While some of these researchers had historically conducted research into animal respiratory viruses, we are unable to confirm if any of them handled live viruses in the work they performed prior to falling ill.

2017, China's decisions of which pathogens required higher biocontainment protocols remained opaque, while the facility had a shortage of appropriately trained personnel.

- [REDACTED] In mid-2019, WIV officials were evaluating and implementing biosafety improvements, training, and procurements in the context of a growing body of broader biosecurity PRC legislation. In November 2019, the WIV, in cooperation with other CAS entities, hosted a biosafety training course for WIV and non-WIV personnel that included speakers from the China Centers for Disease Control and Prevention. Given the timing of the event, this training appears routine, rather than a response to a specific incident.
- [REDACTED] As of January 2019, WIV researchers performed SARS-like coronavirus experiments in BSL-2 laboratories, despite acknowledgements going back to 2017 of these virus' ability to directly infect humans through their spike protein and early 2019 warnings of the danger of this practice. Separately, the WIV's plan to conduct analysis of potential epidemic viruses from pangolin samples in fall 2019, suggests the researchers sought to isolate live viruses.
- [REDACTED] An inspection of the WIV's high-containment laboratories in 2020—only months after the beginning of the COVID-19 outbreak's emergence—identified a need to update aging equipment, a need for additional disinfectant equipment, and improvements to ventilation systems. As this inspection occurred in the midst of the WIV's crisis response to the COVID-19 outbreak, these findings are not necessarily indicative of WIV's biosafety status prior to the outbreak.

(U) **DNA (deoxyribonucleic acid):** A molecule that carries an organism's genetic blueprint for growth, development, function, and reproduction.

(U) **Gain-of-function:** The IC considers this as a research method that involves manipulating an organism's genetic material to impart new biological functions that could enhance virulence or transmissibility (e.g., genetically modifying a virus to expand its host range, transmissibility, or severity of illness). The IC assesses that genetic engineering, genetic modification, and laboratory-adaptation can all be used for gain-of-function experiments, but are not inherently so.

(U) **Genetically engineered or genetically modified viruses** are intentionally altered, created, or edited using biotechnologies, such as Clustered Regularly Interspaced Short Palindromic Repeat (CRISPR), DNA recombination, or reverse genetics. These viruses have intentional, targeted edits to the genome designed to achieve specific results, but unintentional genomic changes may also occur.

(U) **Genome:** The genetic material of an organism. It consists of DNA (and sometimes RNA for viruses).

(U) **Intermediate species/host:** An organism that can be infected with a pathogen from a reservoir species and passes the pathogen to another host species; infection is not sustained in this population.

(U) **Laboratory-adapted viruses** have undergone natural, random mutations through human-enabled processes in a laboratory—such as repeated passage through animals or cells—that put pressure on the virus to more rapidly evolve. Specific changes to the viral genome are not necessarily anticipated in these processes, though the virus can be expected to gain certain characteristics, such as the ability to infect a new species. This is a common technique used in public health research of viruses. We consider directed evolution to be under laboratory adaptation.

(U) **Laboratory-associated incidents** include incidents that happen in biological research facilities or during research-related sampling activities.

(U) **Naturally occurring viruses** have not been altered in a laboratory. Viruses commonly undergo random mutations as part of the evolutionary process and can continue to change over time; mutations may enable a virus to adapt to its environment, such as evading host immune responses and promoting viral replication.

(U) **Outbreak:** A sudden increase in occurrences of a disease in a particular time and place. Outbreaks include **epidemics**, which is a term that is reserved for infectious diseases that occur in a confined geographical area. **Pandemics** are near-global disease outbreaks.



Global Trends 2025: A Transformed World

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We prepared *Global Trends 2025: A Transformed World* to stimulate strategic thinking about the future by identifying key trends, the factors that drive them, where they seem to be headed, and how they might interact. It uses scenarios to illustrate some of the many ways in which the drivers examined in the study (e.g., globalization, demography, the rise of new powers, the decay of international institutions, climate change, and the geopolitics of energy) may interact to generate challenges and opportunities for future decisionmakers. The study as a whole is more a description of the factors likely to shape events than a prediction of what will actually happen.

By examining a small number of variables that we judge probably will have a disproportionate influence on future events and possibilities, the study seeks to help readers to recognize signposts indicating where events are headed and to identify opportunities for policy intervention to change or lock in the trajectories of specific developments. Among the messages we hope to convey are: “If you like where events seem to be headed, you may want to take timely action to preserve their positive trajectory. If you do not like where they appear to be going, you will have to develop and implement policies to change their trajectory.” For example, the report’s examination of the transition out of dependence on fossil fuels illustrates how different trajectories will entail different consequences for specific countries. An even more important message is that leadership matters, no trends are immutable, and that timely and well-informed intervention can decrease the likelihood and severity of negative developments and increase the likelihood of positive ones.

Global Trends 2025 is the fourth installment in the National Intelligence Council-led effort to identify key drivers and developments likely to shape world events a decade or more in the future. Both the product and the process used to produce it benefited from lessons learned in previous iterations. Each edition of *Global Trends* has tapped larger and more diverse communities of experts. Our first effort, which looked out to 2010, relied primarily on expertise within the US Intelligence Community. There was some outreach to other elements of the United States Government and the American academic community. For *Global Trends 2015*, we engaged more numerous and more varied groups of non-US Government experts, most of whom were American citizens.

For the third iteration, *Global Trends 2020*, we greatly expanded the participation of non-American specialists by convening six seminars on five continents. We also increased the number and varied the format of meetings in the United States. These sessions enhanced our understanding of both specific trends and drivers and the ways these factors were perceived by experts in different regions of the world.

Potential Emergence of a Global Pandemic

The emergence of a novel, highly transmissible, and virulent human respiratory illness for which there are no adequate countermeasures could initiate a global pandemic. If a pandemic disease emerges by 2025, internal and cross-border tension and conflict will become more likely as nations struggle—with degraded capabilities—to control the movement of populations seeking to avoid infection or maintain access to resources.

The emergence of a pandemic disease depends upon the natural genetic mutation or reassortment of currently circulating disease strains or the emergence of a new pathogen into the human population. Experts consider highly pathogenic avian influenza (HPAI) strains, such as H5N1, to be likely candidates for such a transformation, but other pathogens—such as the SARS coronavirus or other influenza strains—also have this potential.

If a pandemic disease emerges, it probably will first occur in an area marked by high population density and close association between humans and animals, such as many areas of China and Southeast Asia, where human populations live in close proximity to livestock. Unregulated animal husbandry practices could allow a zoonotic disease such as H5N1 to circulate in livestock populations—increasing the opportunity for mutation into a strain with pandemic potential. To propagate effectively, a disease would have to be transmitted to areas of higher population density.

Under such a scenario, inadequate health-monitoring capability within the nation of origin probably would prevent early identification of the disease. Slow public health response would delay the realization that a highly transmissible pathogen had emerged. Weeks might pass before definitive laboratory results could be obtained confirming the existence of a disease with pandemic potential. In the interim, clusters of the disease would begin to appear in towns and cities within Southeast Asia. Despite limits imposed on international travel, travelers with mild symptoms or who were asymptomatic could carry the disease to other continents.

Waves of new cases would occur every few months. The absence of an effective vaccine and near universal lack of immunity would render populations vulnerable to infection.^a In this worst-case, tens to hundreds of millions of Americans within the US Homeland would become ill and deaths would mount into the tens of millions.^b Outside the US, critical infrastructure degradation and economic loss on a global scale would result as approximately a third of the worldwide population became ill and hundreds of millions died.

^a US and global health organizations currently are working to develop vaccines that may prevent or mitigate influenza pandemics. A breakthrough in the next several years could reduce the risk posed by pandemic influenza during upcoming decades.

^b How fast a disease spreads, how many people become sick, how long they stay sick, the mortality rate and the symptoms and after-effects will vary according to the specific characteristics of whatever pathogen is responsible for a pandemic. This scenario posits plausible characteristics that fall within a range of possibilities for these variables.

https://www.dni.gov/files/documents/Newsroom/Reports%20and%20Pubs/2025_Global_Trends_Final_Report.pdf

POTENTIAL BLACK SWANS THAT WOULD CAUSE THE GREATEST DISRUPTIVE IMPACT

Severe Pandemic	No one can predict which pathogen will be the next to start spreading to humans, or when or where such a development will occur. An easily transmissible novel respiratory pathogen that kills or incapacitates more than one percent of its victims is among the most disruptive events possible. Such an outbreak could result in millions of people suffering and dying in every corner of the world in less than six months.
Much More Rapid Climate Change	Dramatic and unforeseen changes already are occurring at a faster rate than expected. Most scientists are not confident of being able to predict such events. Rapid changes in precipitation patterns—such as monsoons in India and the rest of Asia—could sharply disrupt that region’s ability to feed its population.
Euro/EU Collapse	An unruly Greek exit from the euro zone could cause eight times the collateral damage as the Lehman Brothers bankruptcy, provoking a broader crisis regarding the EU’s future.
A Democratic or Collapsed China	China is slated to pass the threshold of US\$15,000 per capita purchasing power parity (PPP) in the next five years or so—a level that is often a trigger for democratization. Chinese “soft” power could be dramatically boosted, setting off a wave of democratic movements. Alternatively, many experts believe a democratic China could also become more nationalistic. An economically collapsed China would trigger political unrest and shock the global economy.
A Reformed Iran	A more liberal regime could come under growing public pressure to end the international sanctions and negotiate an end to Iran’s isolation. An Iran that dropped its nuclear weapons aspirations and became focused on economic modernization would bolster the chances for a more stable Middle East.
Nuclear War or WMD/Cyber Attack	Nuclear powers such as Russia and Pakistan and potential aspirants such as Iran and North Korea see nuclear weapons as compensation for other political and security weaknesses, heightening the risk of their use. The chance of nonstate actors conducting a cyber attack—or using WMD—also is increasing.
Solar Geomagnetic Storms	Solar geomagnetic storms could knock out satellites, the electric grid, and many sensitive electronic devices. The recurrence intervals of crippling solar geomagnetic storms, which are less than a century, now pose a substantial threat because of the world’s dependence on electricity.
US Disengagement	A collapse or sudden retreat of US power probably would result in an extended period of global anarchy; no leading power would be likely to replace the United States as guarantor of the international order.

PANDEMICS: UNANSWERED QUESTIONS

Scientists are just beginning to recognize the amount of “viral chatter” that is occurring worldwide, discovering previously unknown pathogens in humans that sporadically make the jump from animals to humans. Examples include a prion disease in cattle that jumped in the 1980s to cause variant Creutzfeldt-Jacob disease in humans, a bat henipavirus that in 1999 became known as Nipah Virus in humans, and a bat corona virus that jumped to humans in 2002 to cause SARS. Human and livestock population growth and encroachment into jungles increases human exposure to these previously rare crossovers. No one can predict which pathogen will be the next to start spreading to humans, or when or where such a development will occur, but humans will continue to be vulnerable to pandemics, most of which will probably originate in animals.

An easily transmissible novel respiratory pathogen that kills or incapacitates more than one percent of its victims is among the most disruptive events possible. Unlike other disruptive global events, such an outbreak would result in a global pandemic that directly causes suffering and death in every corner of the world, probably in less than six months.

Unfortunately, this is not a hypothetical threat. History is replete with examples of pathogens sweeping through populations that lack preexisting immunity, causing political and economic upheaval, and determining the outcomes of wars and civilizations. Examples include the Black Death that killed a third of Europeans; measles and smallpox in the Americas that may have killed

90 percent of the native population; and the 1918 influenza pandemic that decimated certain populations, including sickening more than 15 percent of German forces in June 1918. The WHO has described one such pandemic, an influenza pandemic, as “the epidemiological equivalent of a flash flood.” The WHO states, “[pandemics] have started abruptly without warning, swept through populations globally with ferocious velocity, and left considerable damage in their wake.”

Novel pandemic pathogens that spread more slowly but are just as deadly, if not more so, such as HIV/AIDS, are just as likely to emerge by 2030. In fact, such a slow-moving pathogen with pandemic potential may have already jumped into humans somewhere, but the pathogen and disease manifestations may not be recognized yet. This was the case for HIV/AIDS, which entered the human population more than a half century before it was recognized and the pathogen identified.

New discoveries in the biological sciences hold promise for more rapidly identifying pathogens and developing targeted therapeutics and vaccines; however, such advances may be inadequate to keep up with the threat. Drug-resistant forms of diseases previously considered conquered, such as tuberculosis, gonorrhea, and *Staphylococcus aureus* could become widespread, markedly increasing health-care costs and returning large segments of populations to the equivalent of the pre-antibiotic era. Advances in genetic engineering by 2030 may enable tens of thousands of individuals to synthesize and release novel pathogens, compounding the already formidable naturally occurring threat.

Hearing Date:	January 19, 2021
Committee:	SSCI
Member:	Sen. Rubio
Witnesses:	Avril Haines
Info Current as of:	February 8, 2021

Question 15: Would you assess that providing sanctions relief to Iran, the world's leading exporter of terrorism, is likely to increase Iranian-backed terrorist activity?

Answer:

I understand that Iran's continued support for terrorist activity by Hizballah and a range of other groups has continued unabated over the past decade. Providing sanctions relief to Iran would increase Iran's financial resources and would reduce the need to balance support for terrorist activities against other priorities. Whether this would lead to an increase in Iran-backed terrorist activity would depend on a number of factors, including the capability of groups it supports and the counterterrorism and security activities of countries in which they operate.

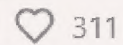
Moderna Surveillance Operation Targeted Independent Media Voices

The second part of our investigation shows how Moderna carefully monitored and attacked voices questioning mandates, industry profiteering, and the efficacy and safety of childhood vaccinations.



LEE FANG

JAN 16, 2024 • PAID



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Part of this effort includes providing talking points to some 45,000 healthcare professionals “on how to respond when vaccine misinformation goes mainstream.” PGP and Moderna have created a new partnership, called the “Infodemic Training Program,” to prepare health-care workers to respond to alleged vaccine-related misinformation.

The company has also used artificial intelligence to monitor millions of global online conversations to shape the contours of vaccine-related discussion. The internal files -- shorthand here as the Moderna Reports -- show high-profile vaccine critics were closely monitored, particularly skeptics in independent media, including Michael Shellenberger, Russell Brand, and Alex Berenson. PGP, which was funded by a \$1,275,000 donation from the Biotechnology and Innovation Organization, a lobby group representing Pfizer and Moderna, has identified alleged vaccine misinformation and helped facilitate the removal of content from Twitter, among other social media platforms, throughout 2021 and 2022.

With PGP, Moderna is monitoring a huge range of mainstream outlets, as well as unconventional ones, such as the Steam online gaming community and Medium. Meanwhile, Moderna also retains Talkwalker which uses its “Blue Silk” artificial intelligence to monitor vaccine-related conversations across 150 million websites in nearly 200 countries. Discussions around “competitor” issues, including discussions of Pfizer are flagged as well as vaccine hesitancy.

Their monitoring team includes Moderna’s global intelligence division, which is run by Nikki Rutman, who spent nearly 20 years as an analyst with the Federal Bureau of Investigation. Rutman was working from the FBI’s Boston office during the COVID-19 effort known as “Operation Warp Speed,” which involved the FBI conducting weekly cybersecurity meetings with the Boston headquartered Moderna. She is among many former law enforcement agents now with the vaccine maker. The involvement of former law enforcement reflects a wider trend in the misinformation-space, as the Department of Homeland Security and FBI have increasingly leaned on social media platforms to shape content decisions as a national security issue.

This is where the line between PR and lobbying gets blurred for Moderna. It's all very well for a company to be information gathering, and attempting to send out a positive message. But it's quite another for it to be using that information for more problematic purposes. Of particular interest in this respect is PGP — the company at the heart of Moderna's misinformation department.

Financed through a \$1,275,000 donation from the Biotechnology and Innovation Organization, lobbyists representing Pfizer and Moderna, PGP maintains close ties to government and media. Moderna first worked closely with PGP on a program called “Stronger” in 2021-22 in which it identified misinformation and shaped content decisions on social media. PGP was particularly well-equipped to help with this since it had backdoor access to Twitter data, known as the “firehose,” and helped Twitter formulate its pandemic-related speech policies.

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